

**REMARKS**

Applicants address the examiner's remarks in the order presented in the Office Action (November 2, 2005).

**STATUS OF THE CLAIMS**

Claims 1-4, 8, 13, 16-25, 28-32 and 39-41 are currently pending. No claim amendments accompany this Reply.

Claims 1-4, 8, 13, 16-25, 28-32 and 39-41 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Hertogs *et al.* (Antimicro. Agents and Chemo. (March 2000) Vol. 44, pages 568-573).

**REJECTIONS UNDER 35 U.S.C. § 102**

Claims 1-4, 8, 13, 16-25, 28-32 and 39-41 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Hertogs *et al.* (Antimicro. Agents and Chemo. (March 2000) Vol. 44, pages 568-573).

The Hertogs reference should not be considered prior art under 35 U.S.C. § 102(a) because applicants' date of invention was prior to the March 2000 Hertogs publication date. In the attached Declaration under 37 C.F.R. § 1.131 ("§ 1.131 Declaration"), the inventors declare that they completed the invention in this country, or in a NAFTA country, or a WTO member country. Their actual reduction to practice of the claimed invention, directly or through persons under their direction and control, was before the March 2000 Hertogs publication date.

The inventors also submit Exhibit A and B, attached. Exhibit A is a listing of claims, as currently pending. Exhibit B is entitled “Test Script for Validation of VIRIS” signed by Kurt Hertogs, one of the named inventors, which shows the functionality of “VircoGen II,” now called “VirtualPhenotype”. The date of Exhibit B is prior to March 2000.

For example, the inventors declare Exhibit B shows at page 4, ¶1.1, the “System and System Features to be tested” which discloses all the steps as claimed in pending claim 1. In particular, Exhibit B discloses “VircoGen II, i.e., the prediction of genotypic resistance based on available phenotypic data.”

The inventors further declare that Exhibit B shows at page 24 under the header “7. Test Summary Log” the following: “Verify the scoring of genotypic calls in the VircoGen™ database (virtual phenotypes)”.

The inventors further declare that the Hertogs report discloses in Exhibit B “VircoGen II, i.e., the prediction of genotypic resistance based on available phenotypic data.” (see Exhibit B at page 4, ¶1.1).

The inventors further declare that the Hertogs report in Exhibit B at page 4, ¶1.1, describes, in detail, new steps to validate the calls based on phenotypic data. The new steps include: create Hot Spots from rules, or use a set of predefined Hot Spots (preferred) (see Exhibit B at page 4, ¶1.1); import a reference set of genotypic and phenotypic data (AV\_Data). The program will identify sequences belonging to each Hot Spot and link them to the Hot Spots (see Exhibit B at page 4, ¶1.1); from the Hot Spots “Special” button, recalculate the Phenotypic Sets. This will link the set of corresponding phenotypes to each Hot Spot (see Exhibit B at page 4, ¶1.1); for each test sequence, a report is created using the new method to determine genotypic resistance. A set of “Profiles” is automatically calculated for each drug. A profile consists of a set of Hot Spots (either positive or negative). To belong

to a profile, a test sequence must obey to all of the positive Hot Spots, and may not belong to any of the negative Hot Spots. The mean and median phenotypic resistance are also calculated for each Profile (see Exhibit B at page 4, ¶1.1).

The inventors further declare that the Hertogs report discloses in Exhibit B at page 8 examples of drugs used in the method as claimed. The inventors further declare that the Hertogs report discloses in Exhibit B at page 8 the following note: “he[sic] phenotypes and sequence data should be imported, the hot spots should be correct and the phenotype set should be calculated before starting the test script.”

The inventors further declare that the Hertogs report discloses in Exhibit B at page 21 various fields in an Excel file which include: sequence identifier; drug (compound tested), fold resistance observed in the antivirogram linked to a sequence; phenotypic call for the real data; and original virtual fold resistance.

The Hertogs report discloses in Exhibit B at page 24 under the header “7. Test Summary Log” the following: “Verify the scoring of genotypic calls in the Vircogen™ database (virtual phenotypes)”.

The inventors declare on page 2 of the §1.131 Declaration that the Hertogs report in Exhibit B, therefore, shows in detail all the steps to be performed to arrive at the result as claimed in Exhibit A.

Since the Hertogs *et al.* reference has been antedated, applicants respectfully request that the rejection of claims 1-4, 8, 13, 16-25, 28-32 and 39-41 under 35 U.S.C. § 102(a) be withdrawn.

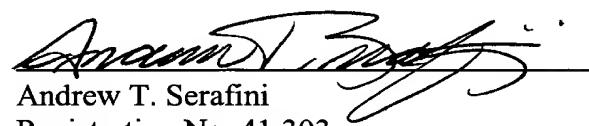
The foregoing represents a *bona fide* attempt to advance the present case to allowance. Applicants submit that this application is now in condition for allowance.

**DOCKET NO.:** TIBO-0029  
**Application No.:** 09/836,477  
**Office Action Dated:** November 2, 2005

**PATENT**

Accordingly, an indication of allowability and an early Notice of Allowance are respectfully requested. If the examiner believes that a telephone conference would expedite prosecution of this application, please telephone the undersigned at 206-332-1396.

Date: January 30, 2006



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